

LVDB CFEB Harness Assembly

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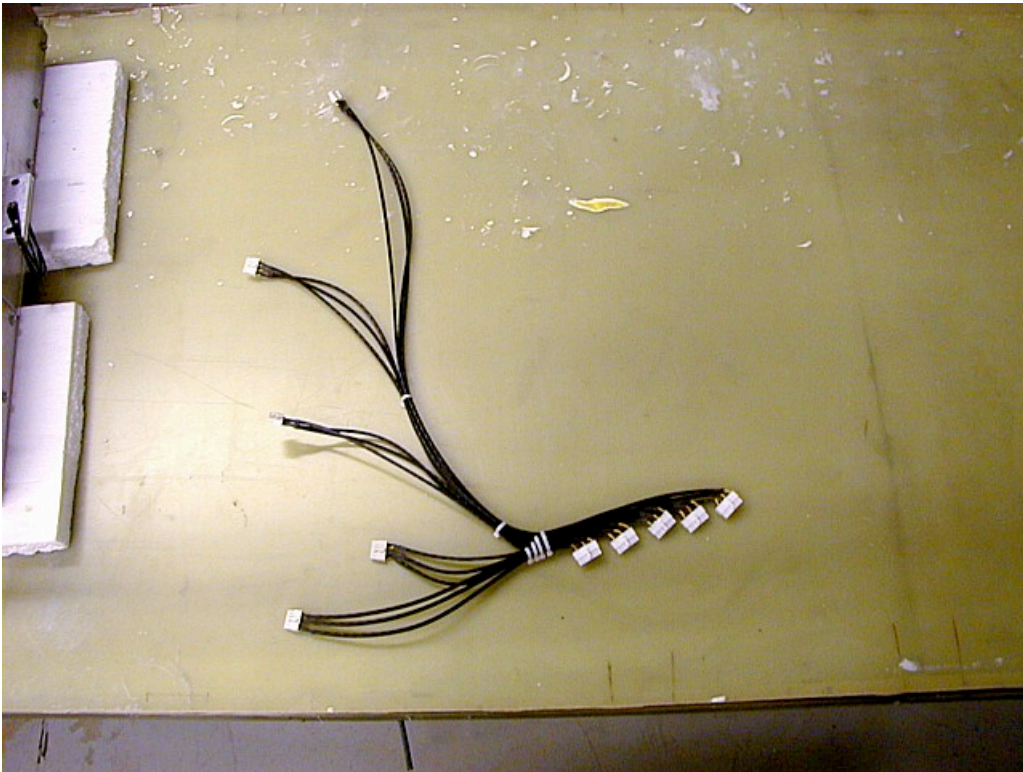
This document will show you how to install an LVDB CFEB harness.

Tools required: None

Preparation required: The LVDB, CFEBs and ALCT need to have been installed on the cooling plate.

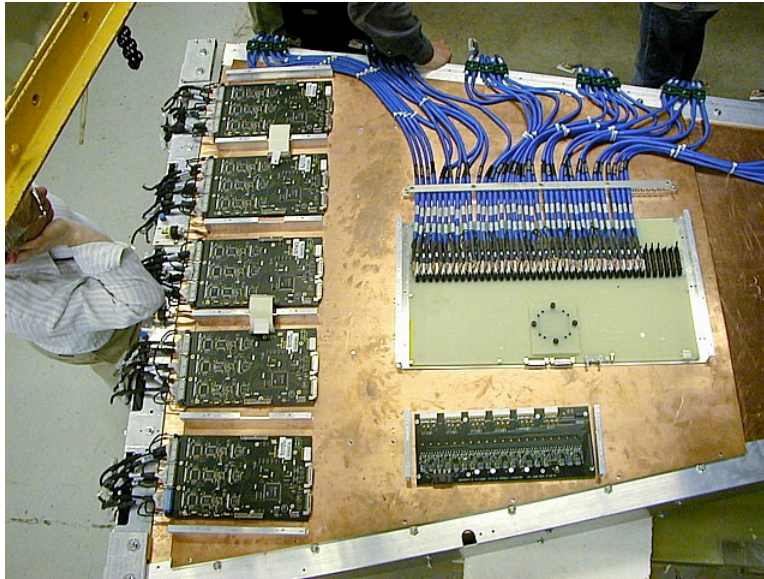
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Here is an LVDB CFEB harness assembly. The cable for CFEB #2 is the shortest cable.



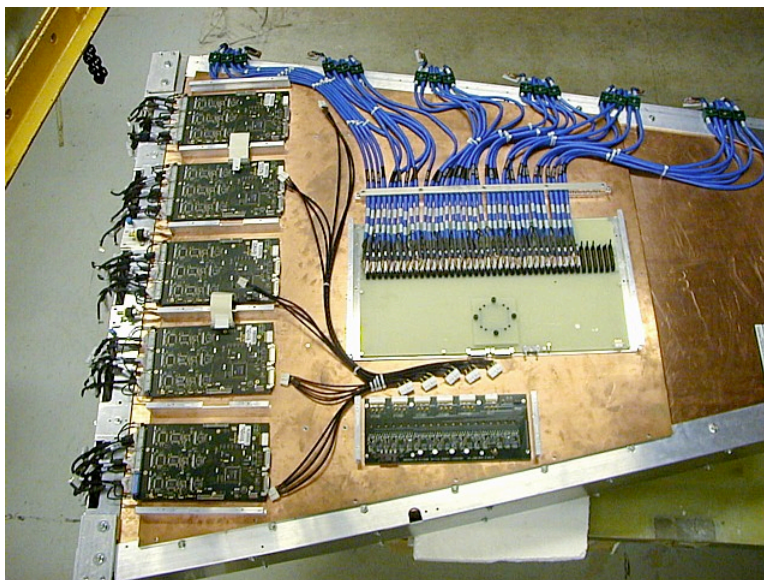
The chamber should have the LVDB, all CFEBs and ALCT mounted.

The chamber shown here happens to be ME3/1. The harness happens to be an ME234/2 harness, so we will not get a perfect fit, but the process of installation is the same in all cases.



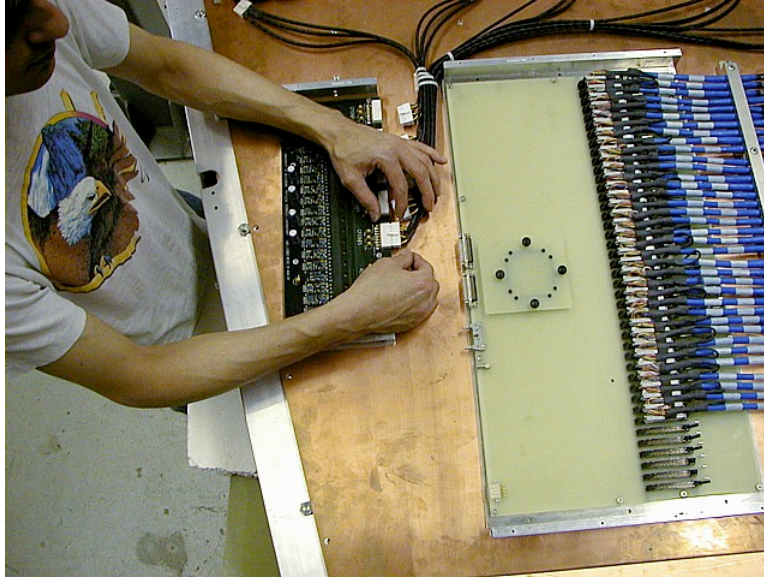
Place the harness as shown. The five leftmost connectors on the back edge of the LVDB supply power to the CFEB boards. Those are the connectors we'll be concerned with.

The rightmost connector on the back edge of the LVDB supplies power to the ALCT. That cabling will be covered later.

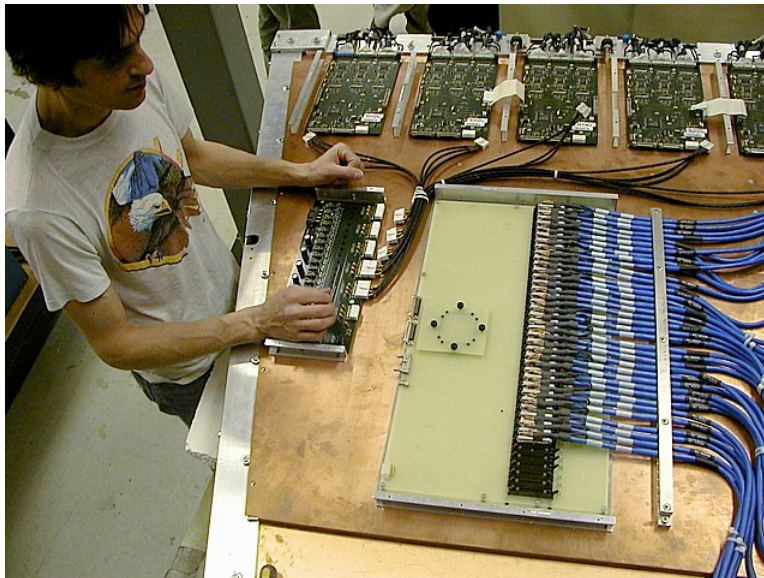


Note that the harness is preformed. The correspondence between connectors should be obvious. If there is any ambiguity as to where a connector should go, then something is wrong. Stop installation and resolve the problem before going any further.

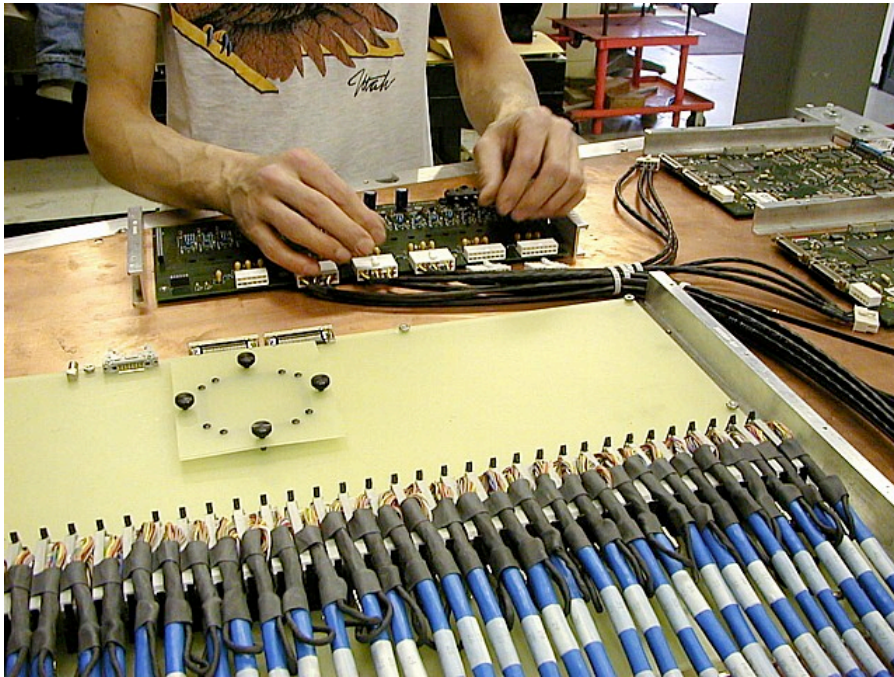
Begin plugging in the connectors on the LVDB side, working from right to left.



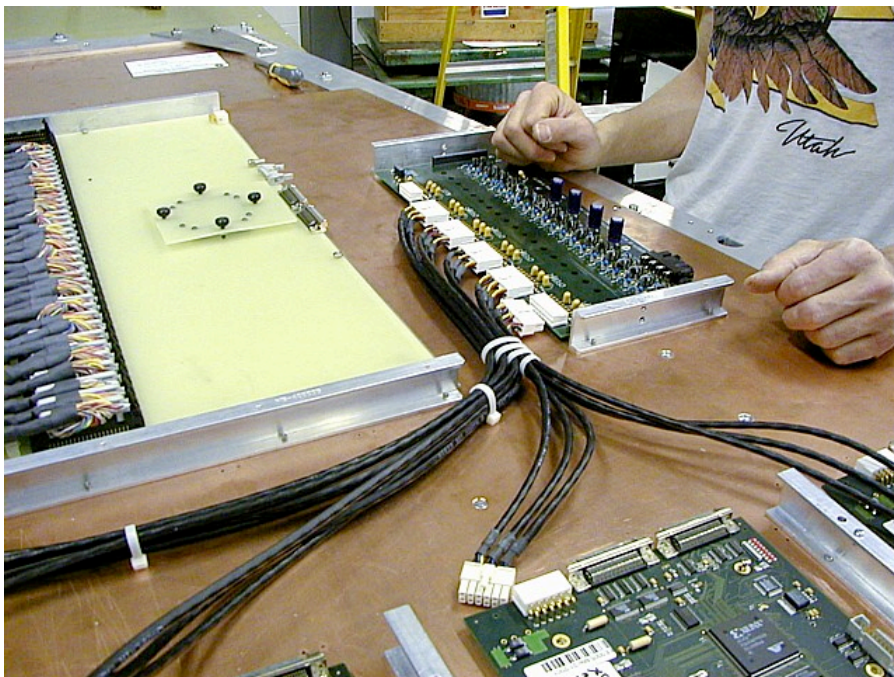
Here we see two connectors done, three left to go.



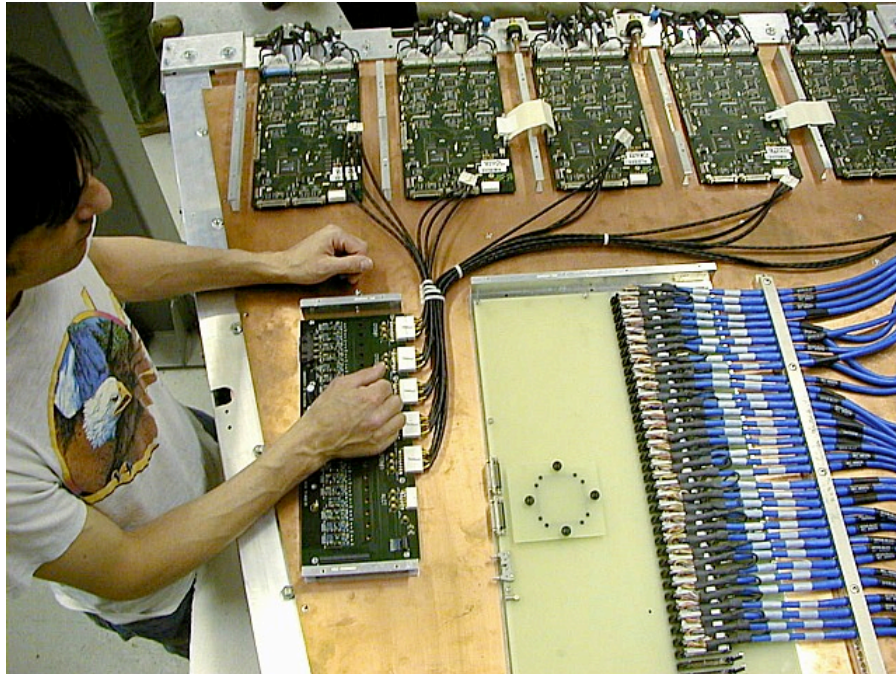
Make sure that each connector seats securely, and that each connector latch closes.



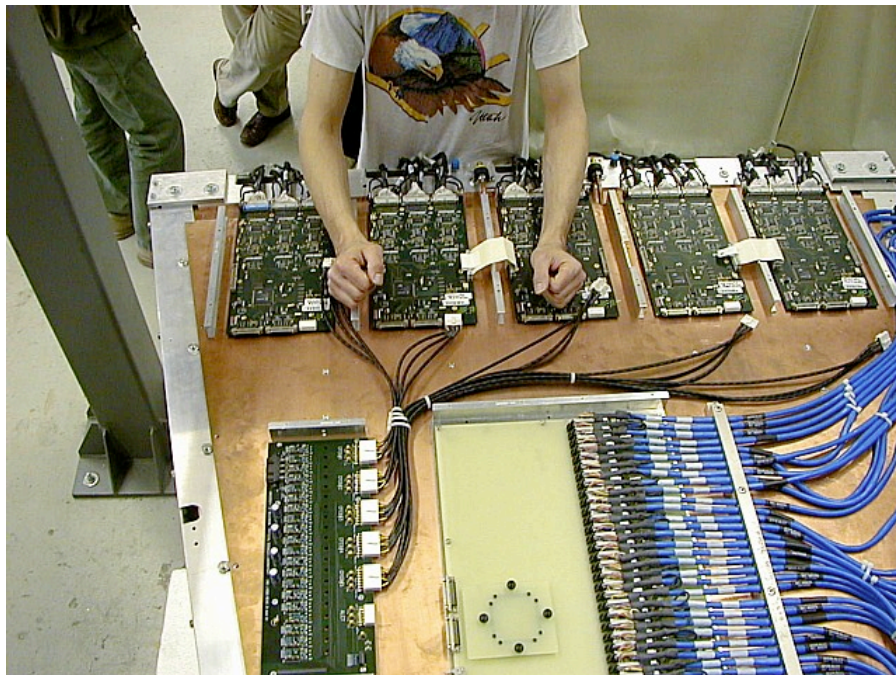
Last connector on the LVDB side...



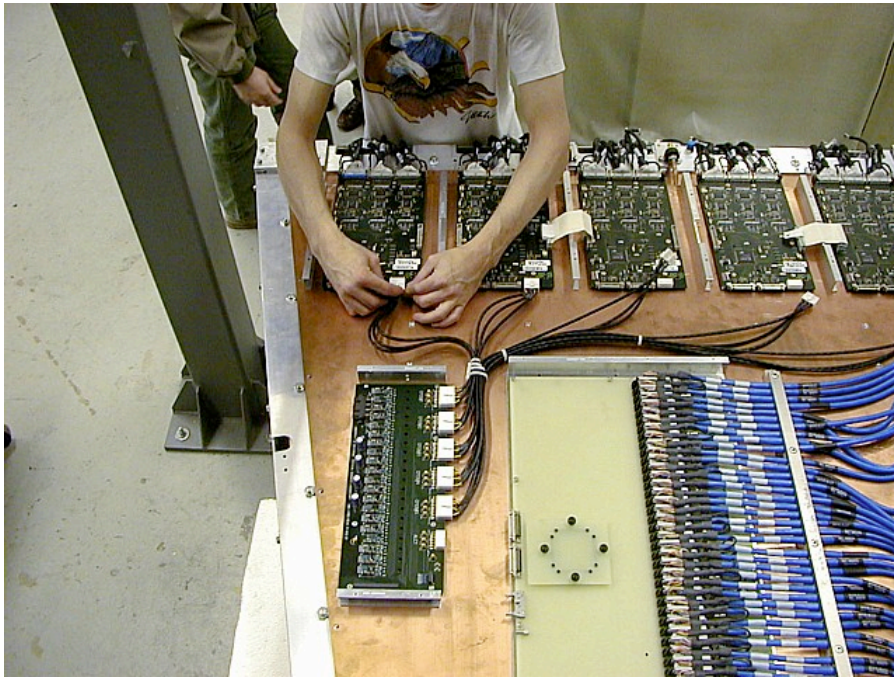
There should be clearance between the LVDB harness and the near edge of the ALCT. This is where the ALCT readout cables will run when the chambers are installed.



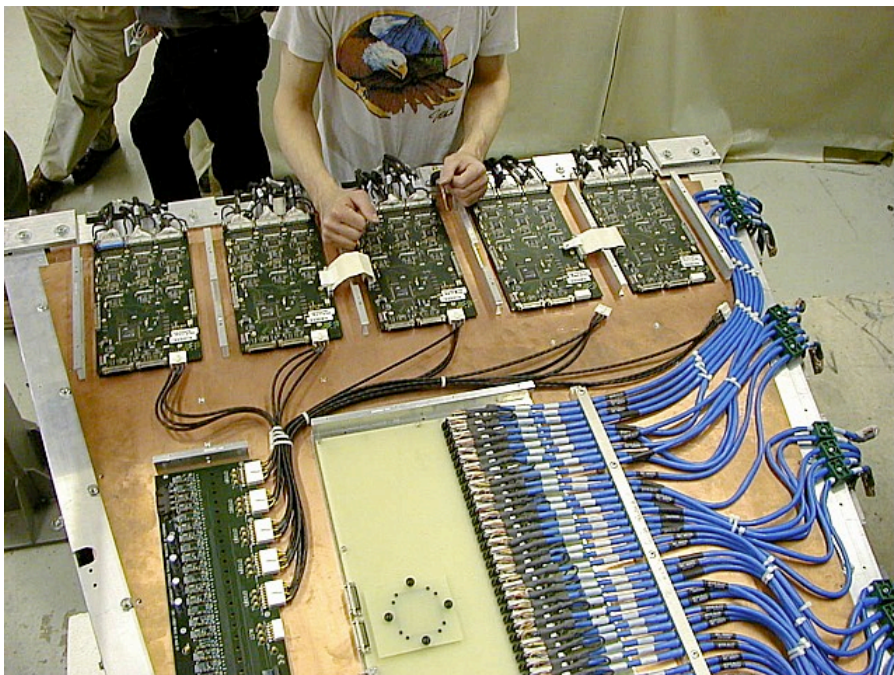
Now begin plugging in cable on the CFEB side of the harness. Start with the shortest cable.



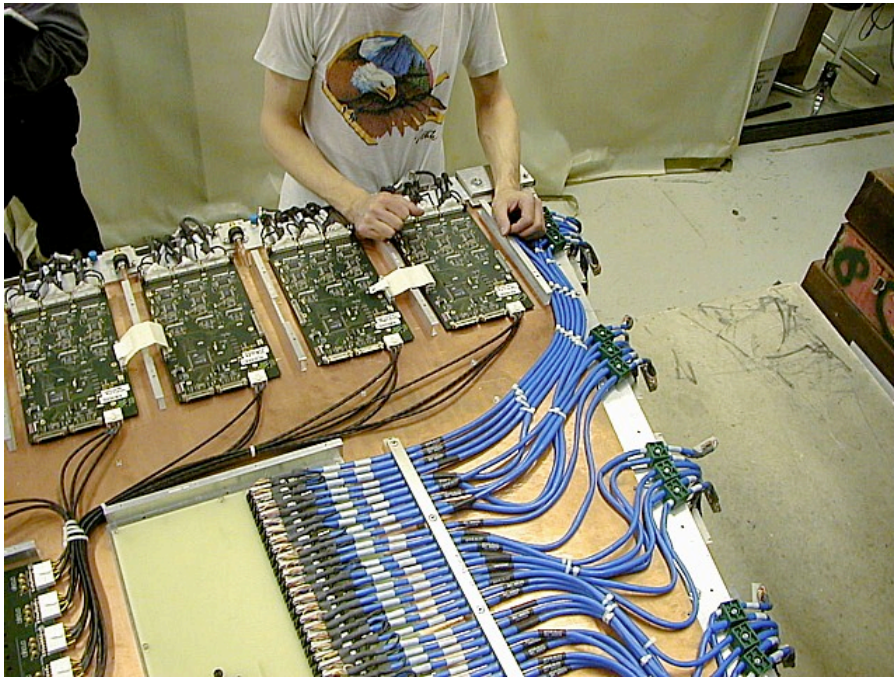
Now plug in the cable for the CFEB nearest to the HV side panel. Bend the cable as shown.



Now plug in the rest of the cables, working your way towards the anode side of the chamber.



Finishing the installation. As with the connectors on the LVDB side, make sure the connectors seat all the way and that the latches grab securely.



A complete, installed LVDB CFEB harness assembly. Disregard the fact that it's not an exact fit in this case, since an ME234/2 chamber was not available for this exercise. The basic points about the cable routing and clearances are still clear in this picture.

